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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD EDMOND BERRY

Appeal 2007-3628
Application 10/045,111¹
Technology Center 2100

Decided: May 13, 2008

Before ALLEN R. MACDONALD, JAY P. LUCAS, and ST. JOHN
COURTENAY III, *Administrative Patent Judges*.

LUCAS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals from a final rejection of claims 1 to 12, 16 to 21, 23 to 35, 39 to 44, and 46 under authority of 35 U.S.C. § 134. Claims 13 to 15,

¹ Application filed January 10, 2002. The real party in interest is International Business Machines Corporation.

22, 36 to 38, and 45 are cancelled. The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

Appellant's invention relates to a method and system for automatically purging a search engine index of broken or out-of-date links. In the words of the Appellant:

The present invention provides a method, apparatus, and computer instructions for pruning search engine indices. A notification is received from a client browser that a Web page retrieval error occurred for a Web page or that the Web page no longer contains selected keywords. In response to receiving the notification, the Web page is automatically deleted from the search engine indices. This automatic deletion may occur upon receiving the notice from the browser or after receiving some threshold number of notifications from browsers.

(Spec. 5, top).

Claim 1 and Claim 43 are exemplary:

1. A method in a data processing system for pruning search engine indices, the method comprising:

receiving a notification by a search engine from a client browser that a Web page retrieval error occurred for a Web page or that the Web page no longer contains selected keywords; and

automatically deleting the Web page from the search engine indices in response to receiving the notification.

43. A computer program product in a computer readable medium for pruning search engine indices, the computer program product comprising:

first instructions for receiving by a search engine a notification from a client browser that a Web page retrieval error occurred for a Web page or that the Web page no longer contains selected keywords; and

second instructions for automatically deleting the Web page from the search engine indices in response to receiving the notification.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

| | | |
|--------|--------------------|-----------------------|
| Glass | US 6,253,204 B1 | Jun. 26, 2001 |
| Steele | US 2003/0191737 A1 | Oct. 09, 2003 |
| | | (filed Dec. 18, 2000) |

Rejections:

R1: Claims 43, 44, and 46 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

R2: Claims 1 to 12, 16 to 21, 23 to 35, 39 to 44, and 46 stand rejected under 35 U.S.C. § 103(a) for being obvious over Glass in view of Steele.

Appellant contends that the claimed subject matter is not rendered obvious by Glass in combination with Steele, for reasons to be discussed more fully below. The Examiner contends that each of the claims is properly rejected.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this opinion. Arguments which Appellant could have made but chose not to

make in the Briefs have not been considered and are deemed to be waived.
See 37 C.F.R. § 41.37(c)(1)(vii) (2006).²

We affirm.

ISSUE

The issue is whether Appellant has shown that the Examiner erred in rejecting the claims under 35 U.S.C. §§ 101 and 103(a). The first issue is dependent on whether a computer program embodied in a volatile signal is statutory. The second issue turns on whether Glass, in view of Steele, teach a method and system for pruning search engine indices as claimed.

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. Appellant has invented a method and system (hereinafter method) for eliminating entries in search engine indices pointing to deleted, out-of-date or dead pages. (Spec., 1 top; 4, top). According to this method,

² Appellant has not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group, except as will be noted in this opinion. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young*, 927 F.2d 588, 590 (Fed. Cir. 1991).

when an Internet browser requests a web page, and an error is returned instead, the browser sends a message to the search engine informing it of such. (Spec., 16, bottom). The search engine has been adapted to receive such messages (Spec., 16, top), and upon receipt of a certain number of them will delete the Web page from the search engine indices. (Spec., 17, middle). The method includes the search engine doing some checking on its own before deleting the page. (Spec., 22, top).

2. The invention of the Appellant is extended to include performing a similar action on browser bookmarks, removing them if they are linked to Web pages that cannot be retrieved. (Spec., 22, l. 18+).
3. Appellant has included claims 43, 44, and 46, drawn to embodiments in which a computer program performing this method is stored on a computer readable medium. (Spec., 24, l. 9). Such media include, *inter alia*, “digital and analog communication links, wired or wireless communications links using transmission forms, such as, for example, radio frequency and light wave transmissions.” (Spec., 24, l. 10+).
4. The reference Glass, though antedating somewhat modern browsers, nonetheless provides a method and system to report broken links to the referencing servers. (Col. 1, l. 18). In Column 4, line 28, is described the retrieval of a first document 1 (e.g., a Google response page) that contains links to other web pages. In the patent’s example, the user requests a link in document 1 that should cause the retrieval of document

2. If document 2 is not available, for any of the reasons itemized in Column 4, lines 41 to 52, including the document being absent, then an error message is sent to the client (or the client generates an error message). (Col. 4, l. 63). That error message is used to construct a second message indicating a broken link, (Col. 5, l. 15), which second message is sent “to the site which originated the page containing the broken link (340)”. (*Id.*) When that second message is received by the server that presented the message with the broken link (“document 1” above), it modifies the document 1 to indicate that the link is in error. (Col. 5, l. 43). That error indication about the bad link is stored on the server that produced the document. (Col. 5, l. 58). A database keeps records of the number of attempts to connect through that broken link. (Col. 7, l. 23). A plurality of reports is needed for action beyond a warning. (Col. 7, l. 65). If a sufficient number of messages about a link being broken is received, then those broken links are deleted from the server, “purged to avoid the accumulation of useless information.” (Col. 8, l. 40).
5. Steele presents a more modern system, including a proper browser, that also checks for bad links. (¶[0095], [0125]). Of special interest is the mention of checking on bad links in bookmarks. (¶[0125]).

PRINCIPLES OF LAW

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. See *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"To reject claims in an application under section 103, an examiner must show an unrebutted *prima facie* case of obviousness. . . . On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness." [*citations removed*] *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

References within the statutory terms of 35 U.S.C. § 103 qualify as prior art for an obviousness determination only when analogous to the claimed invention. *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986); see also *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979) and *In re*

Bigio, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Furthermore, ““there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

With regard to the issue of whether it is obvious to use a more modern technology in substitution for an older one, we take guidance from the recent *Leapfrog Enterprises, Inc. v. Fisher Price, Inc. and Mattel, Inc.*:

“Thus, we bear in mind that the goal of the claim 25 device was to allow a child to press a switch associated with a single letter in a word and hear the sound of the letter as it is used in that word. . . . Accommodating a prior art mechanical device that accomplishes that goal to modern electronics would have been reasonably obvious to one of ordinary skill in designing children’s learning devices. Applying modern electronics to older mechanical devices has been commonplace in recent years.” *Leapfrog Enterprises, Inc v. Fisher Price, Inc. and Mattel, Inc.*, 485 F.3d 1157, 1161, (Fed. Cir. 2007).

ANALYSIS

From our review of the administrative record, we find that the Examiner has presented a prima facie case for the rejections of Appellant’s claims under 35 U.S.C. §§ 101 and 103. The prima facie case is presented on pages 3 to 8 of the Examiner’s Answer.

In opposition, Appellant presents arguments on both issues. The first argument addresses the issue of statutory subject matter under 35 U.S.C. § 101. The issue is no longer in question. Claims 43, 44, and 46 recite a computer readable medium encoded with a computer program. In the Specification, page 24 (See FF#3) the Appellant defines computer readable media as including a data signal embodied in a carrier frequency wave.

Such a claim for computer instructions embodied in a signal only is not considered by this office to be statutory under 35 U.S.C. § 101.³ This policy has recently been confirmed by the Court of Appeals for the Federal Circuit in *In re Nuijten*. “A transitory, propagating signal like Nuijten's is not a ‘process, machine, manufacture, or composition of matter.’ Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007). The Examiner did not err in rejecting claims 43, 44, and 46 under 35 U.S.C. § 101.

Appellant contends that Examiner erred in rejecting claims 1 to 12, 16 to 21, 23 to 35, 39 to 44, and 46 under 35 U.S.C. § 103(a). Reviewing the

³ See, e.g., *In re Nuijten*, 500 F.3d 1346, 1359 (Fed. Cir. 2007). *Ex Parte Hartmann*, No. 2006-1607, 2006 WL 2700810, at 4 (BPAI 2006) (non-precedential). 'Signals' are not statutory subject matter. See also "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility," 1300 Off. Gaz. Pat. Office 142, Annex IV(c) (Nov. 22, 2005).

findings of facts cited above, we find the claimed elements of exemplary Claim 1 present in the Glass reference. Broken link message #340 serves as notification to the server from the client browsing program that a Web page retrieval error occurred. After a number of such messages, the offending Web page is deleted from the search engine indices. See the detailed explanation in (FF#4) above. Steele, which is directed to a similar system that addresses the same problem, broken web links, adds the teachings of a more modern browser and explicitly mentions broken links in bookmarks. It would be obvious, in view of *KSR* and *Leapfrog* (cited above) to combine these teachings to modernize the system of Glass, as claimed.

Appellant argues that Glass does not disclose “receiving a notification by a search engine from a client browser that a Web page retrieval error occurred for a Web page . . .”. (Br., 16, bottom). We see such a notice stored on the server in Glass. (Col. 5, l. 58+).

Appellant argues that Steele does not “disclose or suggest ‘automatically deleting the Web page from the search engine indices in response to receiving the notification’ as recited in claim 1.” (Br., 18, top). However, Glass does, in column 8, line 40.

Appellant argues that the references cannot be properly combined. (Br., 18, middle). We disagree, as mention above on this page.

Finally, with respect to claims 11, 26, and 34, Appellant argues that the combination of references does not teach a second type of notification from a browser that at least one search term is absent from the Web page.

(Br., 19, bottom). We note that one of the triggers for an error message in Glass is the absence of the Web document, which is an extreme case of a search term being absent. In these claims the “second type” of notification is a subset of the first type (a generic retrieval error), and thus need not be differentiated.

In short, we do not find Appellant’s arguments persuasive of demonstrating error in the Examiner’s rejection under 35 U.S.C. § 103.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 43, 44, and 46 under 35 U.S.C. § 101 and claims 1 to 12, 16 to 21, 23 to 35, 39 to 44, and 46 under 35 U.S.C. § 103(a).

DECISION

The Examiner's rejection of all the pending claims is affirmed.

Appeal 2007-3628
Application 10/045,111

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

rwk

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